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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,095	06/25/2003	Matthias Krull	2000DE441/D	4206

25255 7590 06/29/2006

CLARIANT CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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CHARLOTTE, NC 28205

EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/606,095	Applicant(s) KRULL ET AL.	
	Examiner Cephia D. Toomer	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This Office action is in response to the amendment filed April 4, 2006 in which claims 7, 10, 11 and 16 were amended.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/938,495. Although the conflicting claims are not identical, they are not patentably distinct from each other because the additive claim of the present invention recites a solvent. However, the claims of the copending application are open to the inclusion of a solvent.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

It is noted that in Applicant's response mention is made of a Terminal disclaimer over 10/938,495. However, no such disclaimer is found for this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11001692 in view of Krull (US 5,391,632).

JP teaches a low sulfur middle distillate fuel oil comprising less than 0.2 wt % sulfur. The fuel oil contains from 0.001-0.5 wt % of a C₈-C₃₀ fatty acid mixture which contains unsaturated fatty acids having a single double bond and a fatty acid containing two double bonds and other additives such as flow improvers (see CAPLUS abstract in its entirety). The acids are used in a ratio of 1:3 to 15:1 (see machine translation paragraphs 13-16). At paragraphs 16 and 17, JP teaches adding saturated fatty acids and resin acids (to the mixture (see machine translation). JP teaches in the machine translation the use of nitrogen-containing compounds (amides/salts) that function as cold temperature fluidity improvers (paraffin dispersants) at a ratio of 1:10-5:1 (see paragraphs 0019-0020). The machine translation also teaches that the fuel additive may be prepared as a concentrate containing 20 to 80% by weight solvent (see

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paragraph 24). JP teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, JP differs from the claims in that it does not specifically teach the claimed polar nitrogen-containing compound. However, Krull teaches this difference.

Krull teaches terpolymers based on unsaturated dicarboxylic anhydrides, unsaturated compounds (ethylene) and polyoxyalkylene ethers. These terpolymers are the same as those of the instant claims(see col. 2, lines 34-68; col. 3, lines 1-40). Krull teaches that the terpolymers are used as paraffin inhibitors in crude oils and petroleum products such as middle distillates (see col. 9, lines 19-26). The terpolymers are used in an amount from 10-10,000 ppm (see col. 9, lines 32-35).

It would have been obvious to one of ordinary skill in the art to add the paraffin dispersant of Krull with those of JP because Krull teaches that combining the nitrogen-containing compounds of his invention with other cold temperature fluidity improvers result in paraffin crystals that precipitate on cooling and remaining dispersed (see col. 2, lines 21-32).

In the second aspect, JP differs from the claims in that it does not specifically teach the iodine number of the fatty acid mixture. However, since the fuel additive of JP comprises a major amount of unsaturated acids it would be reasonable to expect that the iodine number of the fatty acid mixture would be at least 40 g of I/100g, absent evidence to the contrary.

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5. Claims 7 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 0138461 in view of Krull (US 5,391,632), WO 0015739 and Weers (US 6,129,772)

WO '461 teaches a fuel oil composition comprising a fatty acid mixture and a polar nitrogen-containing flow improver (wax inhibitor)(see claims 1-2 and 8). The flow improver is present in the composition from 0.01-10 wt% (see claim 3). Such polar nitrogen compounds include amine salts (see page 6, lines 21-31; page 7, lines 18-20). Claim 22 contains up to 80 % saturated fatty acids and claim 23 contains 95 % unsaturated fatty acids, 2 % saturated fatty acids and <2 % rosin acids (resin acids). WO also teaches that the compositions may contain organic solvents (see page 12, line 19 and Examples). WO '461 teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, WO differs from the claims in that it does not specifically teach the nitrogen-containing compounds. However, Krull teaches this difference.

Krull teaches terpolymers based on unsaturated dicarboxylic anhydrides, unsaturated compounds (ethylene) and polyoxyalkylene ethers. These terpolymers are the same as those of the instant claims(see col. 2, lines 34-68; col. 3, lines 1-40). Krull teaches that the terpolymers are used as paraffin inhibitors in crude oils and petroleum products such as middle distillates (see col. 9, lines 19-26). The terpolymers are used in an amount from 10-10,000 ppm (see col. 9, lines 32-35).

It would have been obvious to one of ordinary skill in the art to add the paraffin dispersant of Krull with those of JP because Krull teaches that combining the nitrogen-

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containing compounds of his invention with other cold temperature fluidity improvers result in paraffin crystals that precipitate on cooling and remaining dispersed (see col. 2, lines 21-32).

In the second aspect, WO '461 differs from the claims in that it does not specifically teach the claimed Iodine number. However, it would have been obvious to one of ordinary skill in the art to optimize the amount of the acids in order to obtain the claimed Iodine number because WO is directed to the same endeavor as the present invention, i.e., to improve the lubricity of low sulfur fuel oils.

In the third aspect, WO '461 fails to teach the sulfur content of the fuel oil. However, WO 0015739 teaches a low sulfur diesel fuel composition wherein the sulfur content of the fuel is 0.05 % by wt or less (see abstract; page 15, lines 17-26).

It would have been obvious to one of ordinary skill in the art to use a low sulfur fuel because WO 0015739 teaches that federal and international regulations mandate the use of low sulfur fuel in order to reduce emissions.

In the fourth aspect, WO '461 fails to teach claimed solvents. However, Weers teaches fuel oil additives comprising fatty acids are prepared in aromatic and paraffinic solvents (see abstract; col. 5, lines 12-19).

It would have been obvious to one of ordinary skill in the art to have selected the claimed solvents because Weers teaches that these are conventional solvents that are used to prepare fatty acid concentrates for fuel oil compositions.

6. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues that JP does not disclose the terpolymer nitrogen-containing compound and that the skilled artisan would not be motivated to employ Applicant's terpolymer based solely on JP or the WO reference.

The agrees that neither JP nor WO '461 teach the claimed terpolymer. However, Krull teaches that combining cold flow improvers such as those taught in JP and WO with the claimed terpolymers result in better cold flow properties.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

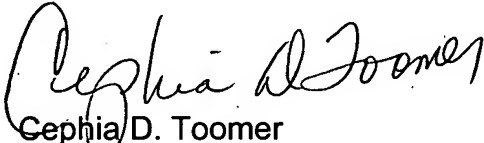
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cephia D. Toomer
Primary Examiner
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